

Application No PCT/L 03/07993

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01J37/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 H01J C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of	Relevant to claim No.		
Χ .	WO 98/19965 A (KALYANARAMAN R MATERIALS MODIFICATION INC (U KRUPASHA) 14 May 1998 (1998-0 page 5, line 14 - page 8, line	1,4-6, 10-12,14		
X	US 6 357 386 B1 (KELLER SILVA 19 March 2002 (2002-03-19) column 2, line 47 - line 59;	1,2,10		
X	PATENT ABSTRACTS OF JAPAN vol. 0122, no. 07 (E-621), 14 June 1988 (1988-06-14) & JP 63 004615 A (HITACHI TOK CO LTD; others: 01), 9 January 1988 (1988-01-09) abstract	1,10		
X Furti	ner documents are listed in the continuation of box C.	-/ χ Patent family members are listed	ìn annex.	
	tegories of cited documents :		<u>.</u>	
"A" docume consid "E" earlier of filling d "L" docume which citation "O" docume other r "P" docume	ant defining the general state of the art which is not ered to be of particular relevance tocument but published on or after the International ate at the international ate at the international ate at the international ate of another at the international ate of another are or other special reason (as specified) and referring to an oral disclosure, use, exhibition or	"T" later document published after the inte or priority date and not in conflict with cited to understand the principle or the invention "X" document of particular relevance; the c cannot be considered novel or cannot involve an inventive step when the do "Y" document of particular relevance; the c cannot be considered to involve an inventive step when the do document of particular relevance; the c cannot be considered to involve an involve an the document is combined with one or moments, such combination being obviou in the art. "&" document member of the same patent	the application but a cory underlying the laimed invention be considered to cument is taken alone laimed invention wentive step when the ore other such docuus to a person skilled	
Date of the	actual completion of the international search	Date of mailing of the international sea	arch report	
2	5 February 2004	02/03/2004		
Name and r	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Schaub, G		



PCT/EI 03/07993

Category °	tion) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 768 702 A (APPLIED MATERIALS INC) 16 April 1997 (1997-04-16) abstract; figures	1,10
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INTERMINIONAL SEARCH REPORT

nform on patent family members

pplication No PCT/EP-03/07993

Patent document cited in search report		Publication date	÷	Patent family member(s)	Publication date
WO 9819965	. A	14-05-1998	EP JP WO US US	0946414 A1 2001504753 T 9819965 A1 2002112794 A1 6409851 B1 2003172772 A1	06-10-1999 10-04-2001 14-05-1998 22-08-2002 25-06-2002 18-09-2003
US 6357386	B1	19-03-2002	EP JP SG	1013791 A1 2000239822 A 85147 A1	28-06-2000 05-09-2000 19-12-2001
JP 63004615	Α	09-01-1988	NONE		
EP 0768702	A	16-04-1997	US EP JP	5746875 A 0768702 A1 9186140 A	05-05-1998 16-04-1997 15-07-1997